Application No.: 09/716,154 Docket No. CX098007

AMENDMENT/REPLACEMENT OF ABSTRACT

The Examiner voiced his objection to the length of the originally filed Abstract, noting that it exceed the 125 word limitation. Below Applicant has amended the Abstract to bring it into compliance, and attached (as a separate sheet) a replacement Abstract. The replacement Abstract contains 72 words.

Please amend the Abstract as follows:

Abstract

A system, device, and method for initial ranging that dynamically adjusts the backoff window size ~~used during a ranging and adjustment process in an attempt~~ to maximize the probability of success ~~outcomes~~ during contention access. The invention ~~adaptive initial ranging scheme~~ takes a first system performance measurement using a first backoff window size, ~~takes~~ a second system performance measurement using a second backoff window size different than the first backoff window size, and determines a third backoff window size based on the first and second system performance measurements. ~~More specifically, the adaptive initial ranging scheme first provides ranging opportunities and specifies a first backoff window size for collision resolution, counts a first number of success outcomes in a first sample of ranging opportunity slots, and determines a first probability of success outcomes, The adaptive initial ranging scheme then provides additional ranging opportunities and specifies a second backoff window size for collision resolution, skips a number of ranging opportunity slots at least equal to the first backoff window size, counts a second number of success outcomes in a second sample of ranging opportunity slots, determines a second probability of success outcomes, determines a ratio R having a numerator equal to the second probability of success outcomes minus the first probability of success outcomes and a denominator equal to the second backoff window size minus the first backoff window size, and selects a third backoff window size based on at least the ratio R.~~

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Replacement Abstract

A system, device, and method for initial ranging that dynamically adjusts the backoff window size to maximize the probability of success during contention access. The invention takes a first system performance measurement using a first backoff window size, a second system performance measurement using a second backoff window size different than the first backoff window size, and determines a third backoff window size based on the first and second system performance measurements.